

APPENDIX D
JOB SAFETY ANALYSIS FORMS

JSA NUMBER: Yerington – 6 NEW X REVISION	DATE: 04/20/02	Company Performing the Job: Brown and Caldwell	SUPERVISOR: Charles Zimmerman SAFETY OFFICER: Brian Bass
JOB TITLE OR TASK: Water and soil sampling and of Wabuska Drain.	TITLE OF PERSON(S) WHO PERFORMS JOB: Site Managers: Brian Bass, Rick Tunney Operations Technician:		ANALYSIS BY: Brian Bass REVIEWED BY: APPROVED BY:
RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) AND/OR PERTINENT JOB SAFETY FORMS: Hard hat, safety goggles or glasses, steel-toed boots. As appropriate: rubber gloves, face shield, rubber boots or hip waders, half-mask respirator.			
SEQUENCE OF BASIC JOB STEPS	POTENTIAL HAZARDS	PREVENTIVE OR CORRECTIVE ACTION	
1. Prepare sample bottles and dress in appropriate PPE.	1. Burn or corrosion from acid spillage, if sample bottles do not have acid already in them.	1. Wear protective gloves and safety glasses or goggles when transferring acid from storage container to sample containers.	
2. Collect water sample and decontamination of equipment.	1. Skin irritation from dermal or eye contact 2. Slipping or falling into Drain.	1. Wear rubber or latex gloves to prevent contact with hands and arms. Wear safety glasses or goggles to prevent eye contact from splashes. 2. Wear rubber boots with treaded soles to reduce potential for slipping. Avoid walking on areas of stream bank that are wet or icy	
3. All Activities	1. Slips, Trips, and Falls	1. All personnel should be constantly watching for trip hazards such as uneven terrain, holes, ditches, stretched wires or ropes, or any other materials or pieces of equipment in their path. 2. Significant below-grade hazards (e.g., holes or trenches) should be marked with flagging, fencing or other appropriate means to make the obstacle easily identifiable. 3. Footwear appropriate for the terrain and work to be performed must be worn. 4. Muddy, snowy, and icy conditions will warrant a more cautious work attitude. Employees should change work speed and style to fit the weather conditions.	
4. All Activities	1. Back, hand, or foot injuries during manual handling of materials.	1. Workers should inspect materials for slivers, jagged or sharp edges, and rough or slippery surfaces. 2. Workers should wipe off greasy, wet, slippery, or dirty objects before attempting to handle them. 3. In most cases, gloves or other protection should be used to prevent hand injuries. 4. Steel-toed boots should be used for protection of the feet when not in the water. 5. Routes should be surveyed for obstacles prior to moving materials from one location to another. 6. All three main factors in manual lifting (load location, task repetition, and load weight) must be considered when evaluating what is safe or unsafe to lift. 7. All manual handling of heavy or bulky objects should be carefully planned to avoid injuries and damage to equipment.	

SEQUENCE OF BASIC JOB STEPS	POTENTIAL HAZARDS	PREVENTIVE OR CORRECTIVE ACTION
5. All Activities	1. Heat exhaustion or stroke.	1. Avoid strenuous work in ambient temperatures over 80 degrees F. 2. Wear light-colored clothing, shaded sunglasses, and hat that provides shade and adequate air movement. 3. Find cool, shady area for breaks or respite from heat. 4. If worker feels dizzy, has a headache, has cool, moist, or pale skin or is weak, immediately move to a cooler environment, loosen tight clothing, provide air circulation to area, and provide small amounts of cool water to drink. 5. If worker has a change in level of consciousness, high body temperature, red, hot skin, rapid or weak pulse, or rapid or shallow breathing, call the emergency phone number and give care in accordance with #4 above.
6. All Activities	1. Hypothermia or frostbite.	1. Avoid working in extreme cold. 2. Wear warm, layered clothing with adequate protection for hands and feet. 3. Find warm area out of the wind for breaks or respite from cold. 4. If worker experiences shivering, irregular pulse, numbness, glassy stare, impaired judgement, loss of muscle control with no shivering, or loss of consciousness, gently move worker to warm place, check vital signs, remove any wet clothing, cover with blankets and warm slowly. 5. If worker experiences loss of feeling or sensation in extremities, discolored or waxy skin, blisters or blue skin, remove wet clothing and jewelry, soak frostbitten area in warm water, cover with dry, sterile dressing (do not rub anything on the area), check vital signs.
7. Unsafe conditions.	1. All potential hazards.	1. Where a situation presents a hazardous condition, the exposed employee will be removed from the hazardous area until all necessary precautions have been taken to eliminate the hazard and ensure their safety.

Personnel Signatures		
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